

B2 64. (Amended) The anti-infective medical device of claim 61 where the oxidant-producing component further comprises a proton donor that, in combination with the reducing agent and the oxidizing agent, forms solid particles dispersed within the polymeric matrix in sufficient amount to provide anti-infective activity to the medical device.

65. (Amended) The anti-infective medical device of claim 61 where the reducing agent is a water soluble iodide salt.

B3 68. (Amended) The anti-infective medical device of claim 61 where the oxidizing agent is selected from the group consisting of anhydrous alkali iodine oxide salts, iodine pentoxide, inorganic and organic peracids, oxidase enzymes, and combinations thereof.

B4 92. (Amended) The anti-infective medical device of claim 61 that is selected from the group consisting of catheters, guidewires, prostheses, implants, and contraceptive devices.

93. (Amended) The anti-infective medical device of claim 76 that is selected from the group consisting of catheters, guidewires, prostheses, implants, and contraceptive devices.

94. (Amended) The anti-infective medical device of claim 77 that is selected from the group consisting of catheters, guidewires, prostheses, implants, and contraceptive devices.

Cancel claim 63, without prejudice.

Add claims 99-111 to read as follows:

B5 99. The anti-infective medical device of claim 76 where the oxidant is elemental iodine.

100. The anti-infective medical device of claim 99 where the oxidant-producing component further comprises a proton donor that, in combination with the reducing agent and the oxidizing agent, forms solid particles dispersed within the polymeric matrix in sufficient amount to provide anti-infective activity to the medical device.

101. The anti-infective medical device of claim 76 where the reducing agent is a water soluble iodide salt.

102. The anti-infective medical device of claim 101 where the reducing agent is an alkali iodide salt.

103. The anti-infective medical device of Claim 102 where the alkali iodide salt has a concentration of about 0.01% to about 16% by weight of the polymeric matrix.

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104. The anti-infective medical device of claim 76 where the oxidizing agent is selected from the group consisting of anhydrous alkali iodine oxide salts, iodine pentoxide, inorganic and organic peracids, oxidase enzymes, and combinations thereof.

105. The anti-infective medical device of claim 104 where the oxidizing agent is selected from the group consisting of alkali iodate salts, iodine pentoxide, and mixtures thereof.

106. The anti-infective medical device of claim 100 where the proton donor is selected from the group consisting of organic acids, inorganic acids, iodine pentoxide, and other acid anhydrides.

107. The anti-infective medical device of claim 106 where the proton donor is selected from the group consisting of perborates and organoperoxy acids.

108. The anti-infective medical device of claim 107 where the proton donor has a concentration of from about 0.01% to about 16% by weight of the polymeric material.

109. The anti-infective medical device of claim 100 where the proton donor is a hydrogen peroxide-generating oxidase enzyme selected from the group consisting of glucose oxidase and diamine oxidase.

110. The anti-infective medical device of claim 109 where the glucose oxidase has a specific activity of from about 2,000 IU/g to about 200,000 IU/g, the diamine oxidase has a specific activity of from about 50 IU/g to about 800 IU/g, and the concentration of the glucose oxidase or diamine oxidase is from about 0.01% to about 2.5% by weight of the polymeric material.

111. The anti-infective medical device of claim 109 further comprising a peroxidase enzyme, where the glucose oxidase or diamine oxidase concentration is at least about 0.01% by weight of the polymeric matrix, the peroxidase enzyme is present at a concentration of at least about 0.01% by weight of the polymeric matrix, and the sum concentration of the oxidase and peroxidase enzymes is from of about 0.02% to about 2.5% by weight of the polymeric matrix.

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